

REMARKS

Claims 1–31 and 47–55 are pending. Claims 6, 10, 11, 13, 14, 26–30, and 49–53 are withdrawn from consideration.

Amendments to the Claims

Claims 1, 15, 24, 47 have been amended to recite a roller comprising a “substantially cylindrical outer surface”. Support for this amendment is found, for example, in the Specification on page 11, lines 28–29 (“In the embodiment of Figure 3, the rollers 38 and 41 each have a cylindrical outer surface as well as a pair of end surfaces.”).

Claim 21 has been amended to replace “the” with -- a -- to correct for antecedent basis.

Rejections Under 35 U.S.C. § 103

Obviousness is a question of law based on underlying factual inquiries set forth in *Graham v. John Deere*: (1) determining the scope and content of the prior art; (2) ascertaining the differences between the claimed invention and the prior art; and (3) resolving the level of ordinary skill in the pertinent art. Objective evidence of non-obviousness must be also considered. In assessing the differences between the claim and the cited references, every feature of the claim must be disclosed or suggested in the cited references or known to one skilled in the art in making a *prima facie* case of obviousness. *CFMT, Inc. v. Yieldup Intern. Corp.*, 349 F.3d 1333, 1342 (Fed. Cir. 2003). A *prima facie* case of obviousness also requires a reasonable expectation of success in the modification or combination of references, which must be found in the cited references or must be known to one skilled in the art. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

Claims 1–5, 7–9, 12, 15, 17, 18, 21–25, 31, 47, 48, and 64–66 stand rejected under 35 U.S.C. § 103(a) as unpatentable over U.S. Patent No. 5,201,714 (Gentelia) in view of U.S. Patent No. 5,522,831 (Sleister). The Examiner characterizes Gentelia as disclosing every feature recited in the claims, except for a conformable roller that is dimensioned and configured for forming a seal in the absence of an instrument extending therethrough (a zero seal) and for contacting and conforming to an instrument, thereby forming an instrument seal in the presence of an instrument extending therethrough. The Examiner relies on Sleister for disclosing a surface of a dynamic seal member of a trocar made of a single elastomer or combination of elastomers to maintain

sufficient pressure against an instrument to prevent gas leakage. The Examiner suggests that adding the elastomeric layer of Sleister to the outside surface of the rollers of Gentelia would provide sealing with or without presence of an instrument.

In the Response to Arguments, the Examiner states that Gentelia discloses a device that forms a seal in the absence of an instrument (a zero seal). In particular, Gentelia discloses FIG. 5 as illustrating "the rollers 6 and 7 in face to face engagement to prevent pressurized air which passes into the housing 2 through opening 15 in the bottom wall of the housing from escaping to atmosphere." Gentelia at 3:2-8. The Examiner's position appears to be that disposing the elastomeric layer of Sleister on the rollers 6 and 7 of Gentelia would endow the rollers 6 and 7 with the ability to also form an instrument seal.

One skilled in the art would have no reasonable expectation of success in the combination suggested by the Examiner. Gentelia discloses a device in which the rollers 6 and 7 form a zero seal. In Gentelia, the rollers 6 and 7 are not involved in the instrument seal. Instead, the instrument seal is provided by a different structure: a slidable plate 16 comprising a smaller opening 18 and a larger aperture 20, each equipped with a slitted, elastic diaphragm that seals with instruments inserted therethrough. Gentelia at 3:16-35; FIG. 3. Gentelia does not disclose or suggest that the rollers 6 and 7 are capable of forming an instrument seal.

Similarly, Sleister does not disclose or suggest that disposing "a single elastomer or combination of elastomers and low friction coatings" on the rollers 6 and 7 of Gentelia would endow the rollers 6 and 7 with the capability to form an instrument seal. In particular Sleister discloses that the single elastomer or combination of elastomers are disposed on dynamic seal members 56. "The dynamic seal members 56 include slotted curved face surfaces 64 which form an opening 66 which is progressively made larger or smaller depending upon the direction of rotation of the seal member 56." Sleister at 7:1-7; FIGS. 7-9. In the closed position, the seal members 56 present a 3-mm opening 66. Sleister at 8:2-6; FIG. 8. In the fully open position, the seal members 56 rotate to provide a 10-mm opening 66. Sleister at 8:8-10; FIG. 9. In both the closed position and the fully open position, as well as in intermediate positions, an instrument extends through and seals with an opening 66 defined by slots in the seal members 56. Consequently, Sleister discloses only an instrument sealing with a slot or groove in the seal

members 56, which together define an opening 66. The rollers 6 and 7 of Gentelia do not have a slot or groove, and consequently, no opening therebetween. Accordingly, one skilled in the art would have no reasonable expectation that disposing the elastomer or combination of elastomers of Sleister on the rollers 6 and 7 Gentelia would result in rollers 6 and 7 that form an instrument seal, as recited in the claims.

Claim 1 as amended recites in part

the substantially cylindrical outer surface of the conformable roller is dimensioned and configured for forming a zero seal in the absence of an instrument extending therethrough, and for contacting with and conforming to an instrument, thereby forming an instrument seal in the presence of the instrument extending therethrough.

Claim 15 as amended recites in part:

a roller included in the seal assembly, the roller comprising a substantially cylindrical outer surface sized and configured to form a zero seal in the absence of the instrument, and to contact with and conform to the instrument, thereby forming an instrument seal therewith in the presence of the instrument.

Claim 24 as amended recites in part:

the resilient material provides the substantially cylindrical outer surface of the roller with properties for forming a zero seal in the absence of the instrument, and an instrument seal in the presence of the instrument

Claim 47 as amended recites in part:

the substantially cylindrical outer surface having properties for forming a zero seal across the working channel in the absence of the instrument, and an instrument seal across the working channel in the presence of the instrument

As discussed above, one skilled in the art would have no reasonable expectation that combining Gentelia with Sleiter as suggested by the Examiner would successful result in the recited features. Consequently, claims 1, 15, 24, and 47 are allowable over the cited references for at least this reason. Because each of claims 2-5, 7-9, 12, 17, 18, 21-23, 25, 31, 48, and 64-66 are dependent on one of claims 1, 15, 24, and 47, these claims are also allowable as dependent on an allowable independent claim.

Claims 16, 19, 20, and 54 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Gentelia, in view of Sleister and U.S. Patent No. 6,238,373 (de la Torre). The Examiner relies on de la Torre only for disclosing a gel material. Because each of claims 16, 19, 20, and 54 are

Application No. 10/776,387
Response filed October 8, 2009
Responsive to an Office Action dated July 9, 2009

dependent on one of claims 15 and 47, these claims are also allowable as dependent on an allowable base claim.

Rejoinder of Withdrawn Claims

As all non-withdrawn claims are allowable over the references of record, Applicants request rejoinder of claims 6, 10, 11, 13, and 14, which are dependent on claim 1, claims 26–30, which are dependent on claim 24, and claims 49–53 and 55, which are dependent on claim 47.

No Disclaimers or Disavowals

Although the present paper may include a combination of alterations to the application or claims, or characterizations of claim scope or referenced art, Applicants are not conceding that previously pending claims in this application are not patentable over the cited references. Rather, any alterations and/or characterizations are made to facilitate prosecution of this application. Applicants reserve the right to pursue any previously pending, or other broader or narrower claims that capture any subject matter supported by the present disclosure, including subject matter found to be specifically disclaimed herein or in any prior prosecution. Accordingly, reviewers of this or any parent, child, or related prosecution history shall not reasonably infer that Applicants have made any disclaimers or disavowals of any subject matter supported by the present application.

Conclusion

Applicants submit that all of the Examiner's rejections have been addressed and overcome, and that all claims are allowable over the art of record. Applicants have submitted amendments and arguments believed to be sufficient to overcome all of the outstanding rejections. Consequently, Applicants have not advanced every argument for the allowability of the claims over the references of record. As such, Applicants do not acquiesce to any of the Examiner's statements or characterizations not specifically traversed. Should the Examiner believe that any outstanding issues are resolvable in an Examiner's Amendment, the Examiner is invited to contact the undersigned.

Application No. 10/776,387

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Please charge any additional fees, including any fees for additional extension of time, or credit overpayment to Deposit Account No. 01-2215.

Respectfully submitted,
APPLIED MEDICAL RESOURCES

BY 
Pui Tong Ho
Registration No. 44,155
Telephone: (949) 713-8383